

CLIMATOLOGICAL DATA FOR SEPTEMBER, 1913.

DISTRICT NO. 3, OHIO VALLEY.

Prof. FERDINAND J. WALZ, District Editor.

GENERAL SUMMARY.

The most important features of the weather conditions prevailing in the Ohio Valley during September, 1913, were: First, the remarkably high temperatures that obtained during the first week and which were a continuation of the intense heat wave that had prevailed with but little interruption since the middle of June; second, the unseasonably cool weather in the early part of the second decade when frosts and freezing temperatures were reported from much of the district, but mainly over the northeastern and eastern sections, with a trace of snow in a few places; third, the general rains during the third week and last two days of the month which effectually broke the long and severe drought; and, fourth, the unusually small number of local storms.

The rains during the latter half of the month were helpful to very late crops such as potatoes, and for putting the soil in condition for fall seeding, yet they were not sufficient to provide much surplus and in consequence streams and water sources were only temporarily affected and at the end of the month there was still a scarcity, and the necessity for hauling water for stock, railroads, and factories continued over large areas in the central portion of the district.

Except for shallow troughs of low pressure passing over the district about the 12th, 16th-18th, 20th, and 29th-30th, high pressure areas largely dominated conditions during the month. The rainfall of the third week was due mainly to a storm which moved from the Gulf region up the Mississippi Valley, the main center of action being to the west of the Mississippi River.

The following table summarizes the chief features of meteorological interest for the several sections of the district:

Portions of States included in the Ohio River Basin.	Temperature.				Precipitation.						
	Average.	Departure.	Highest.	Lowest.	Average.	Departure.	Greatest monthly.	Least monthly.	Greater in 24 hours.	Average number of days.	Average snow-fall.
New York.....	60.0	-0.4	92	23	1.64	-1.42	1.79	1.47	0.79	6	0
Pennsylvania.....	62.1	-1.7	97	24	2.63	-0.46	6.15	1.24	3.10	8	0
Maryland.....	58.8	-2.3	90	22	3.08	+0.59	4.02	2.25	1.13	8	T. ¹
West Virginia.....	64.5	-2.4	100	25	2.89	-0.04	8.89	0.86	2.40	8	T. ¹
Ohio.....	64.5	-1.5	102	26	2.43	-0.31	5.19	0.99	2.20	9	T. ¹
Indiana.....	66.6	-0.6	106	26	3.01	+0.62	7.27	1.34	2.18	9	T. ¹
Illinois.....	68.6	-0.5	109	34	3.44	+0.36	4.65	1.74	2.50	9	0
Kentucky.....	69.6	-0.3	106	29	2.49	-0.43	4.57	1.27	2.18	9	0
Tennessee.....	70.8	+0.4	106	29	3.12	-0.14	6.37	0.80	3.30	8	0
Alabama.....	72.0	-1.0	103	34	4.45	+0.88	6.68	2.67	4.90	9	0
Georgia.....	67.6	....	90	41	1.82	....	1.72	7	0	0	0
North Carolina.....	63.0	-2.3	91	29	5.44	+1.25	9.79	2.88	2.65	11	0
Virginia.....	61.6	-2.7	89	29	3.48	+0.23	4.63	2.51	1.98	9	0

¹ Trace at one station.

TEMPERATURE.

The temperature averaged below normal over the eastern portion of the district from western Pennsylvania southward to North Carolina. It was also below normal over sections of Ohio. It was slightly above normal over most of Tennessee and near normal over the rest of the district. The extremes of temperature were remarkable. In several of the States the range in temperature was between 70° and 80° and from several degrees below freezing to 100° or more, the extreme range for the month in the district being 87° or from 109° at Equality, Ill., on the 3d to 22° at Deer Park, Md., on the 23d.

In western Pennsylvania the month was the coolest September since 1899, and over western New York, western Maryland, West Virginia, southwestern Virginia, western North Carolina, and northern Georgia, the month in the main was unseasonably cool. Over the district as a whole the first week was intensely warm while the second and third decades, except the last two days, were unseasonably cool. During the first week temperatures were remarkably high, maxima of 100° and over being registered on one or more days from Tennessee northward to the north border. Maximum temperature records for September were broken at quite a few stations in Ohio, Indiana, Illinois, and Kentucky, and the week as a whole was probably one of the warmest ever experienced in the district in September. Maximum readings of 106° at Earlington, Ky., and Rome, Ind., are the record high temperatures for September for both of those States. During the first eight days departures in temperature ranged from +3° to +16° over practically all the district, while over the sections south of the Ohio River plus departures continued three days longer.

A rapid change to cooler weather set in about the 12th and during the rest of the month, except the last two days, and over limited areas in the central and northern portions of the district about the 18th and 24th, the temperatures were below normal, the departures ranging from -1° to -21°. There were three distinct cool periods, the first about the 13th-14th which was more pronounced in the northern portion of the district; the second and most severe the 21st-23d, the third about the 26th-28th.

Frosts and freezing temperatures were reported quite generally in the period 21st-23d, and minimum temperatures nearly as low as any that have ever been experienced in September were recorded. The estimates of damage by frost vary decidedly in different localities. In some sections, particularly Ohio, much damage to late corn and vegetables was reported, but these crops were not killed in most places, although temperatures were several degrees below freezing, a dense fog protecting the crops especially along the Ohio River and other streams. In Tennessee there was considerable damage done to

tobacco in lowlands, also to late hay, peas, and beans. In Indiana considerable damage was reported from some localities, but others report that the frost was beneficial, as it served to hasten the ripening of the corn crop. The frost in other sections seems to have been light and to have caused little or no damage of consequence.

PRECIPITATION.

During the first half of the month rainfall over the district was decidedly scattered and local. There were good rains in western North Carolina during the first week and over the northeastern portions of the district in the period 7th-9th and on the 12th, but the first general rains of consequence began about the 15th and continued during practically the entire week from the 15th to the 22d. These were the first rains to materially affect the long drought which had prevailed since April. Generous rains also occurred on the 29th and 30th, being heavy over Tennessee and the southern border sections.

The total rainfall of the month varied decidedly in each of the sections, but in the main the monthly amounts ranged between 2 and 4 inches. Over southwestern Virginia, the mountain sections of North Carolina, and in northeastern Alabama the rainfall, however, was considerably larger, ranging from 4 to 9.5 inches. The heaviest fall in the district was 9.79 inches at Rock House, N. C., while at Huntingburg, in southern Indiana, there was a total rainfall of 7.27 inches. At one station in West Virginia, one in western Pennsylvania, one in western West Virginia, and one in extreme southwestern Tennessee the rainfall was in excess of 6 inches. On the other hand, there were limited areas in nearly all sections from Tennessee northward where the rainfall of the month was less than 2 inches, the notable exception being Illinois.

Snow flurries occurred at a few places in northeastern Ohio, in the northern portion of West Virginia, and in western Maryland on the 22d.

MISCELLANEOUS.

September 5.—Several residences were struck by lightning at Newport, Tenn., and one man was killed in one of the residences. Several persons were badly injured by lightning in various places.

September 6.—Lightning struck and killed a team of horses near Mount Vernon, Ind., and badly injured the driver.

September 7.—A barn and other outbuildings were struck by lightning and burned near Perrysville, Ind. The barn was full of hay, which was destroyed, together with harness, implements, and several head of stock, including a valuable horse. Lightning struck and damaged the power plant of the Trumbull Public Service Co. and several residences at Warren, Ohio. High wind did considerable damage at the Canfield Fair Ground in the same locality.

September 8.—A barn containing 80 tons of hay and a large amount of grain was struck by lightning and destroyed in Wayne County, Ohio. Also several barns were destroyed and three churches and several residences struck by lightning and damaged in Stark County, Ohio.

September 30.—A barn with all its contents was destroyed by lightning in Ashland County, Ohio.

RIVERS.

The rivers and streams were all at low stages throughout the month. Navigation was suspended the entire month in the Cumberland and Tennessee Rivers, except where made navigable by locks and dams. Also navigation was practically suspended in the Ohio River between Paducah and Evansville, only small boats being able to run. There were many bars in the Ohio River, where it is not improved, which were difficult to cross even in small boats. The streams in the upper Ohio Basin were at comparatively low stages during the first three weeks of the month but rose to moderate stages following the week of general rains.

TABLE 1.—Climatological data for September, 1913. District No. 3, Ohio Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Number of rainy days of 0.10 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.							
<i>New York.</i>																					
Allegany.	Cattaraugus.	1,441	7	60.2	-0.4	92	3	25	14	50	1.79	-1.42	0.79	0	6	10	11	9	nw.	C. E. Whitney.	
Baldwin.	Allegany.	1,800	19	58.8	-0.4	92	7	23	14	49	1.47	-0.67	0.67	0	6	11	9	10	w.	C. F. Hoffman.	
Olean.	Cattaraugus.	1,402	5									0.55									John W. Alles.
<i>Pennsylvania.</i>																					
Aleppo.	Green.	1,135	12	62.2	-2.9	97	5	28	23	46	2.85	+0.43	0.60	0	8	17	2	11	se.	J. S. Hinerman.	
Baldwin.	Butler.	1,404	7	61.6	-	92	3	32	14	42	1.50	-	0.70	0	6	18	7	5	e.	S. H. Templeton.	
Beaver Dam.	Beaver.	674	19	61.4	-	95	37	27	23	51	1.85	-0.65	0.48	0	10	7	1	22	U. S. Engineer.		
Brookville.	Jefferson.	1,173	22	61.4	-	95	37	27	23	51	1.57	-1.70	0.80	0	7	6	17	1	12	H. C. Bartholomew.	
Clarion.	Clarion.	1,078	28								1.27	-2.31	0.51	0	6	13	11	6	w.	N. A. Goble.	
Claysville.	Washington.	1,127	9	63.4	-	97	6	28	23	46	2.49	-	1.03	0	8	13	11	8	sw.	E. T. Buchanan.	
Confluence.	Somerset.	1,352	29								3.39	+0.53	0.98	0	7	6	8	6	sw.	Grant Pyle.	
Franklin.	Venango.	955	38	62.0	-1.7	93	27	31	23	46	1.67	-2.05	0.74	0	5	13	6	11	sw.	F. E. Dixon.	
Freeport.	Armstrong.	772	40								2.77	+0.07	1.03	0	8	9	3	18		Mrs. Anna R. Burtner.	
Greensboro.	Green.	798	24								1.90	-0.94	0.62	0	6	15	3	12	sw.	James G. Cramer.	
Greensburg.	Westmoreland.	1,100	6	62.8	-	92	6	31	23	38	3.66	-	1.29	0	10	14	10	6	sw.	Westmoreland Water Co.	
Indiana.	Mercer.	950	17	61.2	-0.8	94	2	27	14	47	1.38	-1.94	0.83	0	11	18	4	8	nw.	A. M. Orr.	
Johnstown.	Indiana.	1,350	16	63.6	-1.0	96	3	31	22	44	3.54	-0.57	1.19	0	8	18	4	8	s.	R. W. Wehrle.	
Lock No. 4.	Cambria.	1,184	25	63.2	-2.2	97	6	33	23	44	4.04	+0.81	2.00	0	10	9	13	8	s.	E. C. Lorentz.	
Lycippus.	Washington.	718	27								1.79	-0.91	0.75	0	8	13	2	15	sw.	R. T. McGowan.	
Mosgrove.	Westmoreland.	1,420	21	63.0	-3.7	87	2	34	23	29	4.46	+0.19	1.48	0	8	10	0	17	sw.	Murray Forbes.	
Pittsburgh.	Armstrong.	775	2								1.48	-	0.41	0	10	13	0	17		C. J. Moore.	
Punxsutawney.	Allegheny.	842	43	65.0	-1.1	92	6	36	23	32	2.68	+0.38	1.48	0	11	13	9	8	sw.	U. S. Weather Bureau.	
Ridgway.	Jefferson.	0	59.3			94	6	28	23	55	3.57	-	0	6	15	5	10	no.	Samuel M. Rosenthal.		
Saegeertown.	Elk.	0	60.0			91	6	28	23	48	4.05	-	1.36	0	6	18	0	9	sw.	F. J. Eagen.	
Sharon.	Crawford.	1,116	22	59.6	-2.3	91	27	24	14	45	2.83	-1.23	1.55	0	8	7	12	11	w.	J. G. Apple.	
Somerset.	Mercer.	940	26	62.6	-	92	27	30	23	43	1.36	-	0.37	0	7	11	7	12	se.	Norman S. Powell.	
Uniontown.	Somerset.	2,250	57	60.1	-0.5	93	27	28	23	47	6.15	+3.04	3.10	0	8	9	11	10	nw.	W. M. Schrock.	
Warren.	Fayette.	999	25	65.4	-0.6	94	6	34	23	40	2.99	-0.10	1.11	0	8	20	1	9	sw.	Wm. Hunt.	
	Warren.	1,137	24	60.5	-1.4	94	3	27	14	49	2.54	-1.24	1.20	0	5	22	0	8	sw.	Anna Simpson.	
<i>Maryland.</i>																					
Deer Park.	Garrett.	2,457	20	58.3	-2.0	90	5†	22	23	46	2.97	+0.68	1.06	T.	0	10	9	13	8	sw.	S. P. Specht.
Grantsville.	.do.	2,351	20	59.6	-2.1	90	6	28	23	44	4.02	+1.61	1.13	0	8	9	12	7	w.	J. S. Miller.	
Oakland.	.do.	2,461	14	58.6	-2.8	90	6	24	13	48	2.25	-0.53	0.90	0	7	11	12	7	w.	R. E. Weber.	
<i>West Virginia.</i>																					
Bancroft.	Putnam.	574	10	69.5	-0.4	100	6	39	23	46	2.75	+0.08	0.60	0	6	11	1	18	ne.	R. E. Dent.	
Beckley.	Raleigh.	2,440	14	59.8	-4.0	88	11	25	22	46	2.22	+0.02	1.60	0	2	20	3	7	w.	John A. Ewart.	
Bens Run.	Pleasant.	622	12	64.3	-4.4	94	3	38	23	40	2.54	+0.23	0.80	0	8	20	3	7	sw.	J. D. Riggs.	
Bluefield.	Mercer.	2,563	19																		Norfolk & Western Ry.
Buckhannon.	Upshur.	1,472	23	62.4	-2.6	90	7	30	23	41	2.04	-1.12	1.00	0	6	18	4	8	sw.	H. A. Darnall.	
Cairo.	Ritchie.	667	11	65.5	-2.8	97	7	33	23	41	4.51	+2.10	0.95	0	10	7	15	5	w.	Van A. Zevely.	
Central Station.	Doddridge.	900	11	61.7 ^a	-	96	6	30	23	41	2.39	-0.68	0.72	0	6	16	4	6 ^a	sw.	G. W. Sherwood.	
Charleston.	Kanawha.	512	28	69.6	-1.3	92	27	32	23	43	3.35	+1.09	1.60	0	10	15	4	11	w.	R. C. Hewes.	
Creston.	Wirt.	612	12	65.8	-2.0	92	5	34	23	48	1.96	-0.50	0.62	0	11	15	5	10	sw.	J. M. Reed.	
Cuba.	Jackson.	544	13	65.4	-2.1	95	27	30	23	42	4.03	+1.89	1.32	0	10	10	14	6	ne.	C. T. Perry.	
Doane.	Wayne.	6																			L. A. Smith.
Elkhorn.	McDowell.	1,933	21	65.0	-1.6	87	27	32	23	37	2.57	-0.27	1.01	0	7	15	9	8	ne.	J. J. Lincoln.	
Elkins.	Randolph.	1,940	14	61.8	-0.2	90	6	31	23	44	5.09	+2.23	1.91	0	9	10	10	10	w.	U. S. Weather Bureau.	
Fairmont.	Marion.	879	21	65.0	-	99	27	33	23	49	3.54	-0.38	0.54	0	11	20	1	9	w.	F. P. Hall.	
Glenville.	Gilmer.	738	24	65.8	-2.0	93	6	35	23	41	2.28	-1.10	0.76	0	7	15	7	8	sw.	Joe N. Craddock.	
Grafton.	Taylor.	985	21	64.8	-2.0	97	6†	32	23	43	2.60	-0.35	1.12	0	6	22	0	8	w.	Joseph Gerken.	
Green Sulphur Springs.	Summers.	1,600	18	63.4	-3.1	91	1†	31	23	45	2.78	+0.60	0.60	0	7	10	11	9	sw.	Arthur George.	
Hinton.	do.	1,400	24	65.7	-2.8	95	6	39	23	41	3.16	+0.42	1.44	0	11	15	5	22	sw.	J. B. Lavender, C. E.	
Holcomb.	Nicholas.	1	60.9 ^a			90*	7	31	23	42	4.80	-	0	0	11	15	3	13	sw.	R. E. Ferguson.	
Huntington.	Cabell.	510	18	66.8	-2.2	93	1†	38	23	40	2.66	+0.35	0.94	0	8	16	3	11	sw.	L. H. Hutchinson.	
Lewisburg.	Greenbrier.	2,200	13	61.6	-3.6	88	7	29	23	41	2.20	-0.57	0.82	0	7	21	5	4	ne.	Geo. T. Argabrite.	
Logan.	Logan.	665	11	70.6	+1.2	94	6	41	23	45	2.10	-1.07	0.85	0	8	15	9	6	w.	Dr. J. E. McDonald.	
Lost Creek.	Harrison.	1,033	17	61.6	-4.1	94	6	25	23	47	1.59	-1.45	0.52	0	6	20	1	9	w.	Allen Smith.	
Madison.	Boone.	704	8	65.4 ^a	-	98*	6	36	23	52	2.17	-	1.00	0	8	14 ^a	15 ^a	0 ^a	sw.	S. E. Bradley.	
Mannington.	Marion.	967	11	62.8	-3.5	94	6	31	23	44	2.28	-1.12	0.73	0	11	17	3	10	w.	Jas. A. Morgan.	
Marlinton.	Pocahontas.	2,169	17	58.0 ^a	-4.9	84	6	30	22	38 ^a	2.88	-	0.00	0	5	18 ^a	4 ^a	8	sw.	C. J. McCarty.	
Morgantown.	Monongalia.	1,250	39	65.6 ^a	-2.3	96	6	41b	24 ^b	35 ^b	1.67	-1.50	0.77	0	10	17	7	8	w.	Horace Atwood.	
Moundsville.	Marshall.	640	11	65.7	-2.3	98	6	31	23	46	2.15	-0.44	0.58	0	10	17	7	8	w.	M. L. Brown.	
New Cumberland.	Hancock.	987	14	63.5	-2.5	94	6	31	23	48	2.05	-0.49	1.15	0	5	13	7	10	s.	Frank S. Evans.	
New Martinsville.	Wetzel.	634	20	66.3	-2.7	99	6	39	23	41	4.57	+1.94	2.40	0	9	17	2	11	sw.	Wm. Ankrom.	
Nuttallburg.	Fayette.	2,252</td																			

TABLE 1.—Climatological data for September, 1913. District No. 3—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees, Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.			
				Mean.			Departure from the normal.			Highest.			Lowest.			Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmetted.	Number of rainy days, 0.01 inch or more.	
				Date.	High.	Low.	Date.	High.	Low.	Date.	High.	Low.	Date.	High.	Low.						
Ohio.																					
Amesville.	Athens.	630	9	65.2	—	—	98	6	31	23	47	2.79	—	—	0.81	T.	0	9	6	9	F. W. Gibson.
Ashland.	Ashland.	1,079	13	64.0	—	0.2	97	2	30	23	46	1.75	—	0.79	0.45	T.	0	10	13	0	S. W. Brandt.
Bangorville.	Richland.	1,380	26	63.7	—	1.3	96	2	28	23	37	2.41	—	0.72	0.88	T.	0	7	13	11	S. M. Painter.
Bellefontaine.	Logan.	1,276	34	64.0	—	2.3	98*	3	28	23	42	2.03	—	0.79	0.43	T.	0	8	7	18	Cory L. Lane.
Bladensburg.	Knox.	1,100	20	59.8	—	5.0	90	2†	28	23	41	2.48	—	0.29	1.68	T.	0	7	7	5	Miss Mary Elliott
Brilliant.	Jefferson.	700	—	63.4	—	—	91	1†	35	19	38	3.00	—	—	2.00	T.	0	6	13	8	Mrs. Mary K. Pennell.
Cadiz.	Harrison.	1,245	9	63.8	—	—	93	6	32	23	41	2.93	—	—	1.92	T.	0	5	16	9	Harry B. McConnell.
Cambridge.	Guernsey.	803	21	63.3	—	2.1	93	2	28	23	39	1.86	—	0.74	0.50	T.	0	8	12	13	Samuel Mehaffey.
Camp Dennison.	Hamilton.	570	20	67.0	—	2.1	101	1†	30	23	46	2.30	+	0.08	0.72	T.	0	9	12	11	Henry F. Pinkvoss.
Canal Dover.	Tuscarawas.	884	20	—	—	—	—	—	—	—	—	—	—	—	—	T.	0	9	12	7	Francis L. Bixler.
Canton.	Stark.	1,069	30	63.1	—	1.0	95	2	31	23	43	5.11	+	2.19	1.85	T.	0	12	12	7	Carl H. Meyer.
Cardington.	Morrow.	1,010	18	63.6*	—	2.3	94*	3	30b	23	37b	2.30	—	0.94	0.81	T.	0	6	17	0	J. W. Shaw.
Chillicothe.	Ross.	630	10	65.2	—	—	98	6	34	23	43	2.53	—	—	1.58	T.	0	10	17	1	Marion Mackey.
Cincinnati.	Hamilton.	628	42	68.4	—	0.6	97	1	40	23	33	1.86	—	0.45	0.99	T.	0	11	9	7	U. S. Weather Bureau.
Circleville.	Pickaway.	694	25	65.9	—	2.1	99	2†	30	23	45	2.09	—	0.27	0.63	T.	0	8	7	13	Dr. H. R. Clarke.
Clarington.	Monroe.	600	10	65.2	—	2.9	99	6	34	23	43	2.93	+	0.20	1.30	T.	0	8	7	10	Col. S. Tschappat.
Columbus.	Franklin.	918	35	65.4	—	0.5	94	2	36	23	33	3.28	+	0.76	1.58	T.	0	12	12	4	U. S. Weather Bureau.
Coshocton.	Coshocton.	770	4	—	—	—	—	—	—	—	—	—	—	—	—	T.	0	9	12	14	Mrs. Ada Jeffries.
Dayton (1).	Montgomery.	899	2	65.8	—	1.0	98	2	34	23	35	2.31	—	0.19	0.51	T.	0	13	9	9	U. S. Weather Bureau.
Dayton (2).	Montgomery.	790	32	66.4	—	1.0	101	2	29	23	45	2.36	—	0.28	0.82	T.	0	12	12	5	Mrs. Edith E. Boyer.
Delaware.	Delaware.	896	16	64.1	—	2.0	97	3	28	23	48	2.65	—	0.30	0.97	T.	0	13	17	5	Dewitt H. Leas.
Demos.	Belmont.	1,325	25	66.2	—	0.4	99	6	36	23	41	4.1	—	0.94	0.64	T.	0	10	19	6	J. T. Dystsart.
Dennison.	Tuscarawas.	846	3	64.8	—	—	97	2†	32	23	44	5.19	—	—	1.80	T.	0	8	18	7	O. A. Cory.
Frankfort.	Ross.	745	21	66.8	—	0.4	96	2	34	22	39	2.10	—	0.38	0.60	T.	0	7	13	1	Samuel F. Neal.
Gallipolis.	Gallia.	580	1	—	—	—	—	—	—	—	—	—	—	—	—	T.	0	9	9	9	n.
Garretttsville.	Portage.	1,005	29	62.6	+	1.1	93	3	29	23	45	1.64	+	1.81	0.56	T.	0	12	13	8	ne.
Granville.	Licking.	960	31	63.8	—	1.8	94	3†	30	23	45	3.01	+	0.12	1.19	T.	0	10	18	6	sw.
Gratiot.	Adams.	1,000	24	63.1	—	2.4	88	2	31	23	36	2.78	+	0.02	1.08	T.	0	8	11	12	Dr. L. E. Davis.
Green.	Green Hill.	500	20	66.8	—	1.9	98	1	35	23	44	2.12	—	0.58	0.62	T.	0	5	15	3	W. B. Longstreth.
Greenville.	Columbiana.	1,136	20	60.4	—	2.8	92	2	26	23	43	1.83	—	0.87	0.51	T.	0	8	15	8	Geo. E. Bentley.
Hamilton.	Dark.	1,060	27	64.0	—	0.6	97	3	32	23	41	1.85	—	0.77	0.54	T.	0	10	11	9	Geo. A. Katzenberger.
Haydenville.	Butler.	601	1	65.4	—	—	102	2	30	23	45	5.01	—	0.56	0.68	T.	0	6	19	4	Earl W. Stout.
Hillsboro.	Hocking.	700	1	63.6d	—	—	93d	3†	30d	23	40d	2.31	—	1.22	0	T.	0	6	14	3	H. W. Stiers.
Ironton.	Highland.	1,063	34	—	—	—	—	—	—	—	—	—	—	—	—	T.	0	8	12	10	Carey H. Roush.
Kenton.	Lawrence.	575	30	67.5	—	0.5	99	6	33	23	45	3.19	+	0.54	1.20	T.	0	8	12	10	James Bull.
Killbuck.	Hardin.	1,015	21	63.2a	—	3.6	97	2	28	22	45	4.08	—	1.17	0.30	T.	0	7	16	6	Frank B. Rarey.
Kings Mills.	Holmes.	1,087	20	65.2	—	0.3	95	2	28a	23	40a	2.28	—	0.51	0.70	T.	0	9	24	2	John A. Schonauer.
Lancaster.	Fairfield.	640	1	—	—	—	—	—	—	—	—	—	—	—	—	T.	0	12	17	6	Frank M. See.
McConnellsburg.	Morgan.	898	18	64.0	—	2.4	93	6	31	23	38	2.71	+	0.43	1.31	T.	0	8	17	4	R. L. Renshaw.
Marietta.	Washington.	710	29	63.6	—	2.9	93	6	33	23	37	3.04	+	0.20	1.10	T.	0	10	10	11	C. H. Morris.
Marion.	Marion.	930	35	65.3	—	0.2	94	5	34	23	35	2.91	—	0.23	0.93	T.	0	10	11	7	Prof. T. D. Biscoe.
Milfordton.	Knox.	1,200	21	63.8	—	1.4	97	2†	27	23	47	4.77	—	0.92	0.64	T.	0	8	19	5	Dr. E. H. Raffensperger.
Milligan.	Perry.	875	20	64.7	—	1.5	97	2†	27	23	50	2.34	+	0.13	0.70	T.	0	9	12	11	L. H. Burgess.
Millport.	Columbiana.	1,145	20	61.1	—	2.6	91	2†	27	23	43	2.14	—	0.27	0.68	T.	0	9	10	7	V. C. Eveland.
Nellie.	Coshocton.	850	13	62.4	—	3.0	95	6	29	23	44	2.16	—	0.38	1.05	T.	0	7	14	3	G. F. Copeland.
New Berlin.	Stark.	1,100	20	63.1	—	—	99	2†	31	23	48	2.18	—	0.24	1.20	T.	0	7	13	12	Ethel L. Gamersfelder.
New Waterford.	Columbiana.	1,053	18	63.1	—	0.7	99	2†	31	23	48	2.18	—	0.24	1.20	T.	0	7	13	5	Clayton Holl.
Ohio State University.	Franklin.	757	30	64.0	—	1.6	96	2	30	23	38	1.88	—	0.90	0.74	T.	0	9	12	10	Sam C. Scott.
Oregonia.	Warren.	1,015	21	64.4	—	1.8	96	6	29	23	42	4.70	+	1.59	1.53	T.	0	12	10	12	Prof. H. C. Lord.
Pataskala.	Licking.	1,015	21	66.4	—	—	99	2†	28	23	42	1.59	—	1.43	0.78	T.	0	7	14	4	E. H. Stephens.
Peebles.	Adams.	645	2	66.0	—	100	2	29	23	48	2.32	—	0.75	0.66	T.	0	10	14	1	J. N. Ridenour.	
Philo.	Muskingum.	1,018	18	64.9	—	2.5	93	6	32	23	35	2.18	—	0.27	0.45	T.	0	7	12	5	Ore. O. Smalley.
Piqua.	Miami.	847	3	—	—	—	—	—	—	—	—	—	—	—	—	T.	0	10	13	3	L. C. Burckholder.
Plattsburg.	Clark.	1,130	20	65.2	+	1.6	98	3	30	23	34	1.86	+	0.74	0.73	T.	0	6	14	5	Harry L. Roberts.
Prospect.	Scioto.	527	32	66.2	+	1.6	99	2	34	23	45	2.56	+	0.13	0.78	T.	0	8	10	1	F. E. Stewart.
Sidney.	Marion.	909	3	—	—	—	—	—	—	—	—	—	—	—	—	T.	0	5	11	8	Neil J. Gast.
Somerset.	Shelby.	965	30	65.8	—	0.2	99	2†	28	23	42	1.59	—	1.43	0.78	T.	0	7	12	12	Hamline B. Blake.
Springfield.	Perry.	1,080	14	64.8	—	2.9	93*	2†	35	23	35*	2.35	+	0.11	0.63	T.	0	12	14	9	Miss M. W. C. Sheridan.
Summerfield.	Clark.	980	19	—	—	—	—	—	—	—	—	—	—	—	—	T.	0	10	9	15	W. A. Webster.
Syracuse.	Noble.	1,187	7	63.4	—	—	95	1†	29	23	43	3.17	—	—	1.15	T.	0	11	11	13	H. R. McClintock.
Thurman.	Meigs.	583	2	67.0	—	—	98	6	34	23	47	2.10	—	0.69	0.67	T.	0	7			

TABLE 1.—Climatological data for September, 1913. District No. 3—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unadjusted.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
<i>Indiana—Continued.</i>																			
Jeffersonville.	Clark.	455	31	69.8	+ 0.3	99	3	39	23	1.96	- 0.60	0.64	0	10	11	10	9	n.	John C. Loomis.
Judyville.	Warren.	450	6	65.7	.....	100	2 [†]	33	23	4.44	- 1.02	0.75	0	13	12	10	8	ne.	W. A. Hill.
Kokomo.	Howard.	840	21	63.5	+ 1.0	98	2 [†]	29	23	4.2	- 1.69	- 0.90	0.54	0	10	11	11	s.	P. H. Robertson.
La Fayette.	Tiptpecanoe.	617	34	65.6	- 0.4	99	3	38	23	1.97	- 0.13	0.80	0	7	12	2	18	w.	Wm. J. Jones, Jr.
Logansport.	Cass.	620	33	66.0 ^a	- 0.0	102	2 [†]	33	23	2.94	- 0.28	1.09	0	9	16	6	6	ne.	Chas. Massena.
Madison.	Jefferson.	480	21	67.2	- 0.4	102	3	37	23	2.85	- 0.28	1.09	0	7	10	5	5	sw.	Miss F. Cooperider.
Marengo.	Crawford.	383	31	67.6	- 1.3	100	2 [†]	40	25	3.8	- 1.03	2.10	0	7	15	5	5	sw.	J. M. Johnson.
Marion.	Grant.	814	27	66.4	+ 0.6	101	2	31	23	2.03	- 1.08	0.45	0	9	11	7	12	s.	James F. Hood.
Mauzy.	Rush.	980	33	63.9 ^b	- 1.0	97 ^c	2 [†]	28 ^d	25	4.49	- 0.40	0.26	0	8	15	5	5	sw.	Elwood Kirkwood.
Monticello.	White.	674	3	68.0	- 1.9	99	2	34	23	1.91	- 1.25	0.46	0	7	14	6	10	e.	J. E. Loughry.
Moores Hill.	Dearborn.	980	12	66.9	- 1.9	98	3	39	23	4.13	+ 1.38	0.95	0	10	14	0	16	ne.	W. S. Bigney.
Mount Vernon.	Posey.	410	27	63.8	- 1.9	98	3	39	23	2.09	- 0.57	0.57	0	8	9	13	13	sw.	Guy B. Green.
Nashville.	Brown.	611	16	65.1	- 2.1	103	3	32	23	4.13	+ 0.75	1.37	0	10	12	9	9	ne.	W. C. Goble.
Paoli.	Orange.	481	31	70.8	+ 1.1	104	2 [†]	35	25	3.30	+ 0.11	1.01	0	7	15	3	12	s.	James A. Gillum.
Princeton.	Gibson.	972	28	64.8	- 0.9	98	3	30	23	2.53	- 0.12	0.94	0	12	10	4	6	sw.	Albert Mills.
Richmond.	Wayne.	450	21	63.2	.....	91	3	33	23	2.70	- 0.78	0.78	0	6	20	3	7	s.	Walter Vossler.
Rochester.	Fulton.	775	8	63.2	.....	98	3	36	23	3.39	+ 0.37	0.93	0	9	8	14	8	ne.	J. E. Troutman.
Rockville.	Parke.	722	27	67.6	+ 0.5	102	2 [†]	36	23	3.39	- 0.92	1.89	0	13	14	4	12	s.	C. A. Lee.
Rome.	Perry.	370	10	71.4	+ 1.0	106	2 [†]	38	22	4.43	+ 0.92	2.02	0	8	9	10	10	sw.	Adam Anspach.
Salamonia.	Jay.	950	8	63.2 ^b	.....	99 ^c	2 [†]	28 ^d	23	2.96	- 0.72	0.75	0	9	11	7	7	sw.	S. A. Armstrong.
Salem.	Washington.	717	20	69.7	0.0	105	3	37	23	3.35	- 0.09	1.03	0	11	10	12	6	sw.	Emmet S. Allen.
Scottsburg.	Scott.	570	19	65.6	- 1.1	103	2 [†]	34	23	2.36	- 0.51	0.69	0	12	12	6	6	sw.	Frank H. Park.
Seymour.	Jackson.	610	26	63.4	- 4.7	102	2 [†]	33	23	2.39	- 0.51	0.65	0	9	7	19	4	sw.	J. Thomas Hays.
Shellberville.	Shelby.	763	9	65.2	.....	100	2 [†]	31	23	4.89	- 0.51	0.69	0	12	12	6	6	sw.	Edgar G. Hodson.
Shoals.	Martin.	523	6	67.2	.....	98	2 [†]	40	23	2.77	- 0.51	0.70	0	10	7	13	13	sw.	Rev. G. Halleck Rowe.
Terre Haute.	Vigo.	498	23	63.0	- 1.4	98	3	39	23	3.78	+ 1.00	1.85	0	11	5	15	10	s.	U. S. Weather Bureau.
Veedersburg.	Fountain.	612	14	66.9	- 1.5	103	2 [†]	36	23	3.79	+ 1.23	1.18	0	17	14	8	8	ne.	L. A. Culver, Jr.
Vevey.	Switzerland.	525	32	68.6	- 1.0	98	3	36	23	4.40	+ 1.45	1.75	0	9	8	11	11	sw.	Miss Frederica Boerner.
Vincennes.	Knox.	431	31	70.2	- 0.5	105	2 [†]	40	23	3.40	+ 1.34	1.60	0	11	14	2	14	s.	Garrett V. List.
Washington.	Daviss.	484	17	70.2	+ 0.7	102	2 [†]	41	23	3.72	+ 0.46	0.83	0	9	12	8	10	sw.	Charles C. Feagans.
Whitestown.	Boone.	529	5	63.8	.....	96	2	35	23	3.56	- 0.50	0.50	0	9	5	23	2	sw.	Clyde O. Laughner.
Winona Lake.	Kosciusko.	865	6	64.8	.....	100	2 [†]	29	23	3.49	- 0.73	1.22	0	7	24	4	4	se.	Rev. Albert A. Young.
Worthington.	Greene.	526	31	67.4	+ 0.2	98	3	41	23	4.26	+ 1.30	1.17	0	8	17	9	9	se.	D. W. Solliday.
<i>Illinois.</i>																			
Albion.	Edwards.	531	22	70.2	+ 0.2	102	3	38	22	4.0	+ 0.69	1.54	0	10	17	6	7	s.	B. F. Michels.
Casey.	Clark.	645	10	69.0	.....	102	2 [†]	38	23	3.80	+ 0.98	2.24	0	6	10	14	6	se.	William Chanoweth.
Charleston.	Coles.	720	28	67.1	- 0.7	101	2	38	23	4.0	+ 0.33	1.75	0	11	14	8	10	ne.	Jacob B. Daisy.
Danville.	Vermilion.	604	12	67.1	- 0.7	101	2	38	23	3.68	+ 0.33	1.75	0	11	14	5	9	ne.	J. J. Lemon.
Equality.	Gallatin.	421	25	72.3	+ 0.1	109	3	40	23	3.68	+ 0.39	1.20	0	8	16	5	9	ne.	Dr. L. W. Gordon.
Fairfield.	Wayne.	450	20	70.4	+ 0.1	103 ^c	3	35	23	3.65	+ 1.24	1.59	0	10	16	2	12	ne.	George A. Tromly.
Flora.	Clay.	495	27	69.1	+ 0.8	104	3	34	23	4.1	+ 0.67	1.34	0	10	11	8	11	ne.	W. L. Hanna.
Golconda.	Pope.	500	35	71.8	+ 0.1	104	3	34	23	4.1	+ 0.90	1.80	0	9	13	8	9	sw.	Dr. D. Lawrence.
Hooperston.	Vermilion.	715	11	65.5	- 0.6	102	3	34	23	4.2	- 0.07	0.81	0	12	15	10	5	sw.	S. F. Hoskinson.
McLeansboro.	Hamilton.	462	30	69.2 ^b	- 0.6	104 ^c	3	42	23	4.14	+ 0.85	0.86	0	9	12	5	5	sw.	Thomas W. Biggerstaff.
Metropolis.	Massac.	346	2	67.2	.....	102	2 [†]	40	23	3.40	- 0.51	0.55	0	8	16	1	10	sw.	Henry H. Humma.
Montrose.	Effingham.	599	3	67.4	.....	102	3	34	23	2.30	- 0.51	0.55	0	9	16	7	7	s.	J. C. Spittler.
Mount Carmel.	Wabash.	424	12	68.9	- 1.2	101	1 [†]	39	23	3.88	- 0.50	0.69	0	10	12	8	10	sw.	Mrs. H. M. Phillips.
New Burnside.	Johnson.	613	18	68.5	- 2.4	102	4	37	23	4.1	+ 0.93	2.11	0	10	18	0	12	se.	Thomas H. McCabe.
Newton.	Jasper.	484	2	67.2	.....	102	2 [†]	37	23	2.56	- 0.51	1.42	0	7	22	5	3	sw.	J. M. Hicks.
Olney.	Richland.	486	26	67.8	- 1.9	103	3	34	23	4.0	+ 0.65	1.60	0	7	12	15	3	sw.	John T. Ratcliff.
Palestine.	Crawford.	500	31	65.2	+ 0.4	100	3	39	23	3.23	- 0.16	1.33	0	10	12	8	10	s.	Duane Shaw.
Paris.	Edgar.	600	20	67.4	- 1.3	101	2	38	23	4.1	+ 0.26	2.50	0	5	12	5	5	sw.	H. P. Twyman.
Philo.	Champaign.	709	29	65.8	- 0.2	100	2 [†]	36	27	4.46	+ 1.30	1.64	0	9	17	7	6	ne.	H. A. Burr.
Rileyville.	Saline.	400	16	67.2	.....	102	4	37	23	3.30	- 0.16	0.95	0	9	9	9	12	ne.	W. H. Thornberry.
Shawneetown.	Gallatin.	307	3	67.2	.....	102	2 [†]	37	23	3.07	- 0.28	0.58	0	11	12	6	6	sw.	Mrs. Mary O. Spivey.
Sidell.	Vermilion.	680	0	67.2	.....	102	2 [†]	37	23	2.78	- 0.22	0.53	0	12	8	14	8	se.	J. H. Scone.
Tuscola.	Douglas.	644	20	67.2	+ 0.2	103	3	36	23	3.43	- 0.02	0.92	0	9	6	15	9	ne.	Joseph O'Neal.
Urbana.	Champaign.	751	11	66.4	+ 0.1	98	1 [†]	37	23	3.50	- 0.53	1.22	0	9	6	15	9	ne.	University of Illinois.
<i>Kentucky.</i>																			
Alpha.	Clinton.	19	68.9	- 1.8	90	1 [†]	40	23	32	2.12	- 1.04	0.45	0	8	11	6	13	w.	W. W. Hicks.
Anchorage.	Jefferson.	700	12	68.5	- 0.1	99	2 [†]	37	23	2.22	- 0.55	0.68	0	10	13	6	11	sw.	C. E. Barrett.
Bardstown.	Nelson.	637	16	71.1	- 0.7	104	2	39	23	2.97	+ 0.28	1.04	0	8	14	5	10	s.	T. S. Talbott.
Beattyville.	Lee.	650	9	68.6	- 1.4	100	6	33	23	5.00	+ 0.28	0.64	0	7	6	10	14	e.	G. W. Cann.
Beaver Dam.	Ohio.	441	10	71.7	+ 0.5	103	2 [†]	36	23	4.50	- 1.11	0.66	0	8	13	6	11	s.	W. T. Austin.
Berea.	Madison.	1,070	12	70.2	+ 1.0	98	1	33	23	4.15	- 0.57</td								

TABLE 1.—*Climatological data for September, 1913. District No. 3—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.	
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	
Kentucky—Continued.																			
Middlesboro.	Bell.	1,128	18	67.8	-1.0	95	2	38	21†	44	1.80	-0.95	0.41	0	7	16	8	6	B. H. Perkins.
Mount Sterling.	Montgomery.	930	23	67.6	0.0	96	2	37	23	41	3.06	+0.17	1.02	0	11	12	6	12	Jas. O'Connell.
Owensboro.	Daviss.	479	16	69.9	-0.7	98	3	39	22	37	4.25	+1.44	0.87	0	11	11	5	14	Henry S. Berry.
Paducah.	McCracken.	341	24	5							2.65	-0.34	1.25	0	6				S. A. Fowler.
Pikeville.	Pike.										3.50		1.50	0	8				I. M. Williams.
Richmond.	Madison.	926	21	71.4	+0.8	101	2	40	23	43	3.07	+0.43	0.63	0	12	11	4	15	J. W. Crooke.
St. John.	Hardin.	777	17	69.0	+1.0	100	2†	35	22	38	2.54	+0.55	1.10	0	11	14	2	14	Bethlehem Academy.
Scott.	Kenton.	15	67.5	-2.5	98	1	32	23	41	2.74	+0.28	0.84	0	10	11	5	14	E. B. Wilson.	
Shelby City.	Boyle.	1,087	19	68.0	-1.6	101	2	32	23	52	1.63	-1.39	0.82	0	10	14	8	8	H. F. Ewing.
Shelbyville.	Shelby.	759	24	70.3	+0.8	103	3	38	23	43	3.46	+0.57	1.95	0	8	10	7	13	C. R. Burnett.
Taylorsville.	Spencer.	489	11	68.5	-0.2	99	3	37	23	40	3.16	-0.24	0.58	0	12	12	5	13	E. D. Bourne.
Williamsburg.	Whitley.	939	17	69.5	-0.8	97	1†	37	22	47	2.61	-0.53	0.84	0	11	14	6	10	N. C. Jones.
Williamstown.	Grant.	943	11	66.8	-0.2	97	1†	37	23	38	3.11	+0.02	0.65	0	10	16	6	8	Miss Rose Carter.
Tennessee.																			
Ashwood.	Maury.	725	40	72.2	+1.5	99	3	37	22	42	1.77	-1.89	1.05	0	6	3	8	19	Mrs. Joseph W. Fleming.
Benton.	Polk.	880	29	72.2	+1.1	98	2	37	22	39	2.82	-0.21	1.35	0	5	11	11	8	George L. Williams.
Birds Bridge.	Greene.	7									3.90		0.82	0	12	16	1	13	David B. George.
Bluff City.	Sullivan.	18									4.00	+1.15	0.93	0	10	13	2	15	Walter C. Masengill.
Byrdstown.	Pickett.	1,026	21	71.0	+0.6	94	1†	41	23	38	1.61	-1.70	0.45	0	6	4	11	4	John Lacy.
Carthage.	Smith.	500	30	72.5	+1.2	102	2†	38	22	41	1.48	-1.75	0.57	0	10	14	3	13	Earl C. Pickering.
Cedar Hill.	Robertson.	625	15	72.7	-0.1	104	2	37	22	44	1.89	-1.30	1.20	0	8	16	5	9	J. Frank Rufin.
Celina.	Clay.	484	10								1.51	-1.93	0.48	0	8	16	0	14	Charles M. Anderson.
Charleston.	Bradley.	709	29								3.12	-0.46	0.92	0	9	16	1	13	John T. Weeks.
Chattanooga.	Hamilton.	808	34	71.2	0.0	95	2	41	22	30	3.74	+0.49	1.69	0	12	8	10	12	ne.
Clarksville.	Montgomery.	500	53	72.7	+2.7	106	3	37	22	42	1.65	-1.27	0.90	0	8	11	10	9	U. S. Weather Bureau.
Clinton.	Anderson.	800	29								3.12	+0.31	1.20	0	6	13	0	17	Dr. James A. Lyon.
Crossville.	Cumberland.	1,895	1	69.04		95	2	36	22	36†	2.73		1.05	0	7				H. C. Slover.
Dandridge.	Jefferson.	8									3.66		1.10	0	6	11	4	15	J. E. Converse.
Decatur.	Melgs.	850	18	70.8	-0.1	100	1	35	22	42	3.69	-0.02	1.38	0	13	12	10	8	w.
Dickson.	Dickson.	800	20	71.0	-0.5	100	3	33	22	43	2.13	-0.32	1.67	0	6	19	3	8	Nathan R. Sugg.
Dover.	Stewart.	500	17	71.9	-0.4	103	3	36	22	42	2.65	-0.40	0.77	0	7	11	7	12	Asa M. Tippit.
Dunlap.	Sequatchie.	726	4	67.1 ^b		98 ^b	8	35 ^b	22	42 ^b	4.84		2.00	0	11	6	12	4	S. Bradford Boyd.
Elizabethton.	Carter.	1,575	22								3.55		0.95	0	11	20	0	10	Charles Boyd.
Erasmus.	Cumberland.	1,850	16	66.6	+0.3	96	6	30	22	47	3.61	+0.16	1.30	0	9	8	14	8	Mrs. Sara E. Ashley.
Florence.	Rutherford.	560	31	72.1	+0.8	98	3	39	22	34	2.15	-1.33	0.54	0	8	15	8	7	Erastus P. Bell.
Franklin.	Williamson.	645	26	71.4	+0.1	99	3	38	22	36	2.41	-1.14	1.37	0	6	13	2	15	Young M. Rizer.
Hells Hill.	Rutherford.	10									1.37	-2.37	0.36	0	6	16	2	12	Edward F. Wright.
Hohenwald.	Lewis.	983	30	72.8	+3.0	101	3	32	22	43	2.42	-0.70	1.55	0	9	9	11	10	Mrs. Mary Lutzelman.
Iron City.	Lawrence.	600	18	70.6	-1.3	99	3	33	22	43	3.53	-0.30	1.66	0	7	4	20	6	Capt. H. Paul Seavy.
Jefferson City.	Jefferson.	3									3.51		1.30	0	8	8	17	3	Calvin C. Maddox.
Johnson City.	Washington.	1,620	20	67.8	-0.1	101	7	32	22	42	3.57	+1.00	1.43	0	6	19	9	2	Ward Crosby.
Johnsonville.	Humphreys.	364	29	71.8	-0.4	103	3	36	22	43	2.52	-0.70	0.80	0	8	7	12	11	Miss Sallie B. Mathews.
Kingston.	Roane.	29									4.51	+0.88	1.45	0	11	17	0	13	Henry Crumbiss.
Knoxville.	Knox.	977	42	70.2	+0.8	94	2	43	22	31	3.34	+0.53	1.45	0	10	10	10	10	U. S. Weather Bureau.
Lebanon.	Wilson.	522	4	72.6	-0.1	101	3	43	22	39	2.43		0.69	0	9	11	5	14	H. Logan Fields.
Lewisburg.	Marshall.	727	19	72.0	+0.5	99	3	40	22	42	3.21	-0.49	1.30	0	9	10	12	8	Dr. Robert D. Crutcher.
Liberty.	De Kalb.	672	18								0.80		0.21	0	6	11	0	19	Bretten Evans.
Loudon.	London.	816	22	70.5		97	2	40	22	38	3.30	-0.35	1.12	0	6	16	2	12	Robert W. Clark.
Lynnyville.	Giles.	770	26	71.0	0.0	97	3	39	22	33	5.08	+1.12	2.33	0	6	14	13	Col. James H. Burrow.	
McGhee.	Monroe.	8									4.50		1.46	0	8	17	0	13	Miss Alice L. Headrick.
McMinnville.	Warren.	1,038	32	72.5	+2.7	100	23	34	22	45	2.75	-0.48	1.00	0	9	12	8	10	Horace H. Stiles.
Mayville.	Blount.	1,050	20								3.59		1.17	0	9	15	10	5	Edward H. Barry.
Mountain City.	Johnson.	2,486	16	62.8	-0.6	85	7†	31	23	42	1.79	-1.89	1.06	0	10	9	6	12	U. S. Weather Bureau.
Nashville.	Davidson.	654	22	72.2	+0.7	99	3	43	22	32	1.79	-1.89	1.05	0	8	5	6	19	Dr. Charles T. Burnett.
Newport.	Cooke.	1,280	23								3.32		0.97	0	6	14	2	14	Burl W. Buttram.
New River.	Scott.	1,215	5								2.63		0.97	0	11	9	12	9	Mrs. Ross Woods.
Palmetto.	Bedford.	770	23	73.0	+0.7	101	3	40	22	37	2.84	-0.82	1.20	0	11	9	12	Oliver C. Kirksey.	
Perryville.	Decatur.	387	17	71.6	-0.8	102	3	38	23	45	4.60	+1.91	1.26	0	10	10	17	Fred Beal.	
Pinewood.	Hickman.	7	72.6			101	1†	29	22	55	1.95		1.25	0	3	10	8	12	Samuel G. Wilson.
Rogersville.	Hawkins.	1,150	20	69.0	+0.2	97	7	39	22	42	3.74	+1.01	1.12	0	8	15	10	ne.	
Rugby.	Morgan.	1,410	24	88.0	+0.7	98	2	33	23	48	2.78	-0.80	0.66	0	7	12	6	12	W. H. Carrington.
Savannah.	Hardin.	442	30	73.6	+1.5	103	3	40	22	38	6.37	+3.14	3.20	0	10	7	12	Herbert O. Eckel.	
Sevierville.	Sevier.	7	72.4			98	4	37	22	39	3.41		1.37	0	8	6	7	17	University of the South.
Sewanee.	Franklin.	2,000	19	68.2	-1.3	91	3	38	22	29	3.96	+0.89	1.00	0	5	7	15	8	Ernest H. Hull.
Sparta.	White.	920	7	70.6		96	2†	37	22	40	2.35		1.00	0	5	7	15	Hudnall A. Boden.	
Springville.	Henry.	377	11	71.2	-0.9	105	3	35	22	42	4.11	+0.61	1.12	0	10	18	5	7	J. Caloway Carr.
Tazewell.	Clayborne.	1,350	16	67.2		97	2	34	23	44	3.14	-0.26	0.98	0	7	12	6	12	Raeburn T. Moore.
Tullahoma.	Coffee.	1,075	26	70.2	+0.3	97	3	37	22	34	5.58	+2.44	2.58	0	10	11	8	se.	John K. Roberts.
Walling.	White.	909	9								2.30		0.75	0	9	8	7	15	Harry C. Boyd.
Waynesboro.	Wayne.	753	28	71.6	+1.5	100	3	34	22	42	2.95	-0.42	1.36	0	9	4	15	William R. Wilson.	
Wildersville.</																			

TABLE 1.—*Climatological data for September, 1913. District No. 3—Continued.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.			Sky.			Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
<i>North Carolina.</i>																				
Altapass.	Mitchell.	2,629	...	61.4	...	84	3	30	23	39	6.60	...	1.50	0	10	5	17	8	s.	Altapass Inn.
Andrews.	Cherokee.	1,800	3	66.5	...	91	1	33	22	44	4.36	...	1.15	0	12	12	13	5	sw.	J. D. Link.
Asheville.	Buncombe.	2,255	34	63.7	-1.3	87	2	36	23	37	4.15	+ 1.11	1.82	0	12	10	11	9	se.	U. S. Weather Bureau.
Banners Elk.	Avery.	3,750	5	58.3	...	79	1†	29	23	39	6.16	...	2.10	0	10	14	6	10	w.	T. L. Lowe.
Blantyre.	Transylvania.	1,900	1	...	...	...	...	...	...	7.68	...	1.70	0	12	...	...	...	...	r. w.	R. W. Collett.
Blowing Rock.	Watauga.	4,090	4	...	...	...	...	...	...	7.32	...	1.75	0	9	...	...	...	...	e. g.	E. G. Underdown.
Brevard.	Transylvania.	2,230	12	63.2	-4.2	85*	8	34	22†	40*	6.39	+ 1.36	1.19	0	21	12	0	18	...	Prof. C. H. Trowbridge.
Bryson City.	Swain.	2,000	25	...	...	...	...	...	...	3.10	- 0.20	0.99	0	9	...	...	...	...	d. k.	D. K. Collins.
Cane River.	Yancey.	2,700	...	...	...	...	...	...	...	2.88	...	0.78	0	12	...	...	...	...	...	Hiram A. Proffitt.
Cullowhee.	Jackson.	2,100	3	64.6	...	87	2	33	22†	43	3.99	...	1.12	0	10	13	4	13	nw.	Frank H. Brown.
Eagles Nest.	Haywood.	5,050	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	s. c.	S. C. Satterthwait.
Ellijay.	Macon.	2,500	...	...	...	...	...	...	...	3.35	...	0.87	0	12	...	...	...	...	g. m.	Chas. G. Mincy.
Hendersonville.	Henderson.	2,167	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Highlands.	Macon.	3,850	23	59.0	-1.3	78	2	31	22	31	8.83	+ 3.18	2.65	0	14	10	13	7	se.	T. G. Harbison.
Hot Springs.	Madison.	1,328	15	67.2*	-2.9	89	7	39	23	35	3.61	...	1.00	0	7	16	12	2	w.	P. A. Garner.
Jefferson.	Ashe.	2,900	6	61.3	...	85	1	31	23	40	6.69	...	1.58	0	12	5	3	22	w.	Prof. E. J. Johnson.
Marshall.	Madison.	1,646	11	66.8	-1.2	91	6	37	23	40	3.30	+ 0.45	0.80	0	10	13	7	10	e.	M. L. Church.
Murphy.	Cherokee.	1,614	37	...	...	...	...	...	...	4.24	+ 0.75	1.08	0	11	...	...	...	...	m.	Miss Victoria Mingus.
Rock House.	Macon.	3,100	21	61.1	-5.2	82	2	36	22	28	9.79	+ 3.09	1.66	0	15	7	12	11	ne.	Barry C. Hankins.
Transon.	Ashe.	2,600	1	...	...	...	...	...	...	8.83	...	1.91	0	11	...	...	...	...	s. m.	S. M. Transon.
Waynesville.	Haywood.	2,792	19	63.2	-2.1	89	2	31	23	42	2.95	+ 0.35	0.91	0	9	13	8	9	ne.	Mrs. Chas. E. Quinlan.
<i>Virginia.</i>																				
Blacksburg.	Montgomery.	2,170	22	62.2	-2.2	87	1†	32	23	42	2.99	- 0.08	1.39	0	9	10	5	15	w.	Agricultural Exp. Station.
Burke's Garden.	Tazewell.	3,250	18	58.5	-1.8	82	7	29	3	41	3.62	- 0.07	1.45	0	8	11	5	14	w.	C. H. Greer.
Elk Knob.	Lee.	3,243	10	67.1	-1.8	89	7	37	22	23	2.97	- 0.18	0.92	0	10	15	6	9	ne.	Henry Nicoll.
Ivanhoe **.	Wythe.	2,028	9	60.2	...	80	7	36	23	28	4.51	...	1.70	0	13	14	7	9	w.	Miss Alice G. Jewett.
Max Meadows.	Washington.	2,028	17	63.0	-2.4	87	25	31	23	47	3.36	+ 0.34	1.98	0	7	12	10	8	w.	James M. Graham.
Mendota.	Gilles.	1,350	4	...	...	...	...	...	...	4.63	...	0.90	0	11	...	...	...	...	f. m.	Frank M. Barker.
Mountain Lake.	Montgomery.	4,348	3	57.1	...	78	1†	32	22†	33	2.51	...	1.33	0	7	21	1	3	...	H. E. Dorland.
Radford.	Scott.	1,773	4	...	...	...	...	...	...	3.73	...	1.80	0	9	...	...	...	...	a.	Arthur Roberts.
Spears Ferry.	Wythe.	1,221	17	...	...	...	...	...	...	3.54	- 0.14	1.30	0	7	...	...	...	...	...	Miss L. E. Venable.
Wytheville.	Wythe.	2,293	20	62.0	-1.8	86	1†	34	23	39	2.89	- 0.40	1.00	0	12	11	10	9	e.	U. S. Weather Bureau.

*, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.

† Also on other dates.

† Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for September, 1913. District No. 3, Ohio Valley.*

Stations.	Watershed.	Day of month.																													Total.															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30															
<i>New York.</i>																																														
Allegany.....	Allegany.....			T.			T.										T.	.42	.06		T.	.79	.10									.35	1.79													
Bolivar.....	do.....				T.												T.	.52	.20		T.	.67	.19									.07	1.65													
Clean |||.....	do.....																T.	.32	.12			.55	.42											1.47												
<i>Pennsylvania.</i>																																														
Allegheny.....	Ohio.....			.50	.45												T.	.56	.60			.38	.10										.06	2.85												
Baldwin.....	Allegheny.....				.10	T.											T.	.20	.17	.03		.70	.10	.02								T.	.23	1.50												
Beaver Dam |||.....	Ohio.....					.32											T.	.36	.43	.03		.27	.07	.02								T.	.21	1.85												
Beaver Falls |||.....	do.....			.05	.29												T.	.20	.16			.35	.06	.03								T.	.12	1.34												
Brookville.....	Allegheny.....			.02	.11												T.	.60	.69	.64	T.	.87	.08										.03	1.57												
Cheat Haven.....	Monongahela.....																T.	.02				.51	.32											.08	2.69											
Clarion |||.....	Allegheny.....					.10											T.	.24	.44	1.03		.25	.27											.06	1.27											
Claysville.....	Ohio.....					.09											T.	.26	.28			.98	.35											.03	3.39											
Confluence |||.....	Youghiogheny.....					.92	.25										T.	.02	.08			.17	.05	T.										.03	1.68											
Coraopolis |||.....	Ohio.....					.40											T.	.02	.07			.36	.04	.05									T.	.08	2.57											
Davis Island Dam |||.....	do.....					.12	.01										T.	.02	.07			T.	1.13	.01									T.	.36	5.43											
Derry Station.....	Allegheny.....					.64	.28										T.	.08	.10			.37	T.											.09	1.80											
Edinboro.....	do.....					.05											T.	.64	.21			.39	.08	.04										T.	.12	1.38										
Ellwood City |||.....	Ohio.....					.13	.32										T.	.23	.74			.53	.14											T.	.14	2.49										
Franklin |||.....	Allegheny.....																T.	.14	.47	T.		.37	.54	.03										T.	.14	2.77										
Freeport |||.....	do.....																T.	.62	.50			.34	.12										T.	.14	1.90											
Greensboro |||.....	Monongahela.....																T.	.64	.32	.01		.90	.05										T.	.02	3.66											
Greensburg.....	Youghiogheny.....																T.	.07	.13	.02		.68	.04										T.	.10	0.7											
Greenville.....	Ohio.....																T.	.06	.05			T.	.19	.12									T.	.08	1.32											
Grove City.....	do.....	T.															T.	.09	.19	.12		.68	.03										T.	.06	1.22											
Herrs Island Dam |||.....	Allegheny.....																T.	.12	.33	T.		.21	.04	T.									T.	.04	1.51											
Indiana.....	do.....																T.	.67				.20	.16										T.	.10	3.54											
Irwin.....	Monongahela.....																T.	.10				.62	.26	.04									T.	.15	2.88											
Johnstown.....	Allegheny.....																T.	.12				.40	.48	T.									T.	.03	4.04											
Lock No. 4 |||.....	Monongahela.....																T.	.47				.05	.32	.15									T.	.04	1.79											
Lyciopus.....	Allegheny.....																T.	.09	.12			.07	.50	.02									T.	.06	3.46											
Mosgrove.....	do.....																T.	.01	.18	T.		.13	.40	.01	T.	.41	.27	.01							T.	.05	1.48									
Parkers Landing |||.....	Ohio.....																T.	.12				.62	.08	.04									T.	.01	1.24											
Pittsburgh.....	Allegheny.....																T.	.59	.89			.05	.26	.07			.20	.06	.01				T.	.24	2.86											
Punxsutawney.....	do.....																T.	.52				.92	.12	.01									T.	.04	3.05											
Ridgway.....	do.....																T.	.40				.70												T.	.02	2.63										
Seegerstown.....	do.....																T.	.76	.15			.01	.10										T.	.06	2.84											
Saltsburg |||.....	Ohio.....																T.	.11				.01	.98	.05	T.		.47	.01					T.	.03	1.36											
Sharon |||.....	Youghiogheny.....																T.	.30				.52	.90	T.		.21	.90	.11					T.	.02	6.15											
Somerset.....	Allegheny.....																T.	.97				.07	.50	.02									T.	.02	2.18											
Springdale |||.....	Monongahela.....																T.	.41				.08	.30	.09									T.	.09	4.03											
Uniontown.....	do.....																T.	.16				.02	.59	.04	T.		.12	.40					T.	.10	0.05											
Warren.....	Allegheny.....																T.	.01	.46	T.		.02	.59	.04	T.	.02	.20	.02						T.	.02	2.54										
West Newton |||.....	Youghiogheny.....																T.	.18				T.	.02	.59	.04	T.	.02	.16	.02					T.	.02	1.72										
<i>Maryland.</i>																																														
Deer Park.....	Youghiogheny.....																	.25	.15	.24			.05	.56	.26	.28	.05	.06	T.										2.97							
Grantsville.....	do.....																T.	.36	.13	.19		.10																4.02								
Oakland.....	do.....																T.	.13	.05																			2.25								
<i>West Virginia.</i>																																														
Bancroft 	Great Kanawha.....																																												.45	2.75
Beckley.....	do.....																																												.22	2.22
Bens Run.....	Ohio.....																T.	.28																										.05	2.54	
Bluefield.....	Great Kanawha.....																T.	.90	.25			T.	.20																			.13	3.02			
Brandonville 	Monongahela.....																T.	.27				T.	.73																				.24	4.51		
Buckhannon.....	do.....																T.	.27				T.	.20	.10	T.		.01	.00	T.											.02	2.39					
Cairo.....	Little Kanawha.....</																																													

TABLE 2.—*Daily precipitation for September, 1913. District No. 3—Continued.*

TABLE 2.—*Daily precipitation for September, 1913. District No. 9—Continued.*

TABLE 2.—*Daily precipitation for September, 1913. District No. 3—Continued.*

Stations.	Watershed.	Day of month.																																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total.		
Kentucky—Con.																																		
Louisville (2).	do.								.08																								44 .15 1.92	
Manchester ||.	Kentucky.								.60																							.28 1.76		
Marion.	Ohio.																																.52 .22 3.46	
Maysville ||.	do.																																.41 1.80	
Middlesboro.	Cumberland.																																.18 .24 3.06	
Mount Sterling ||.	Licking.									T. 1.02																						.03 .38 4.25		
Owensboro ||.	Ohio.																																.44 2.65	
Paducah ||.	do.																																.10 3.55	
Pikeville ||.	Big Sandy.																																.45 .43 3.07	
Richmond ||.	Kentucky.									T. .10																						.32 .06 2.54		
St. John ||.	Salt.										T. .04																					.36 .02 2.74		
Scott.	Licking.										T. .04																					.82 .05 1.63		
Shelby City.	Kentucky.											.05																				.34 4.46		
Shelbyville ||.	Salt.											T. .07																				.52 .26 3.16		
Taylorsville.	do.																																.16 .14 2.61	
Williamsburg ||.	Cumberland.																																.23 .11 3.11	
Williamstown ||.	Licking.										T. .21																							
Tennessee.																																		
Ashwood.	Tennessee.																																T. 1.05 1.77	
Benton.	do.																																.15 2.82	
Birds Bridge.	do.																																.12 .61 3.90	
Bluff City.	do.																																.79 4.00	
Byrdstown.	Cumberland.																																.45 1.61	
Carthage.	do.																																.41 .15 0.90	
Cedar Hill.	do.																																.38 .03 1.89	
Celina.	do.																																.92 .62 3.12	
Charleston.	Tennessee.																																.07 1.62 3.74	
Clarkanooga.	do.																																.40 .54 1.65	
Clarksville.	Cumberland.																																.05 3.12	
Crossville.	Tennessee.																																.1.05 T. 2.73	
Dandridge.	do.																																.08 1.04 3.66	
Decatur.	do.																																.38 .08 3.66	
Dickson.	do.																																.55 1.12 2.13	
Dover.	Cumberland.																																.77 .55 T. 2.65	
Dunlap.	Tennessee.																																.20 4.84	
Elizabethhton.	do.																																.40 3.85	
Erasmus.	Cumberland.																																.1.30 3.61	
Florence.	do.																																.02 52 T. 2.15	
Franklin.	do.																																.1.37 2.41	
Halla Hill.	do.																																.17 .36 1.37	
Hohenwald.	Tennessee.																																.04 1.05 2.42	
Iron City.	do.																																.50 3.51	
Jefferson City.	do.																																.42 3.57	
Johnson City.	do.																																.80 18 2.52	
Johnsonville.	do.																																.93 47 4.51	
Kingston.	do.																																.67 0.03 3.34	
Knoxville.	do.																																.06 52 T. 2.43	
Lebanon.	Cumberland.																																.1.30 0.03 3.21	
Lewisburg.	Tennessee.																																.10 0.80 1.50	
Liberty.	Cumberland.																																.64 .72 3.30	
Loudon.	Tennessee.																																.2.33 5.08	
Lynnville.	do.																																.54 .44 4.50	
McGhee.	do.																																.1.00 .06 2.75	
McMinnville.	Cumberland.																																	
Maryville.	Tennessee.																																	
Mountain City.	do.																																.49 3.79	
Nashville.	Cumberland.																																.02 96 10 T. 1.79	
Newport.	Tennessee.																																.T. 3.32	
New River.	Cumberland.																																.15 .56 2.63	
Palmetto.	Tennessee.																																.T. 20 .06 2.84	
Perryville.	do.																																.96 .86 4.60	
Pinewood.	do.																																.60 1.25 3.74	
Rogersville.	do.																																.20 .40 3.74	
Rugby.	Cumberland.																																.60 .04 2.79	
Savannah.	Tennessee.																																.6.37	
Sevierville.	do.																																.71 .10 3.41	
Sparta.	Cumberland.																																.1.00 2.35	
Springville.	Tennessee.																																.56 4.11	
Tazewell.	do.																																.2.58 .68 3.14	
Tullahoma.	do.																																.5.60 .60 2.30	
Walling.	Cumberland.																																.62 .53 3.77	
Waynesboro.	Tennessee.																																.94 1.60 3.80	
Wildersville.	do.																																	

TABLE 2.—*Daily precipitation for September, 1913. District No. 3—Continued.*

Stations.	Watershed.	Day of month.																													Total.									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30									
<i>North Carolina.</i>																																								
Altapass.	Tennessee.	1.20		1.50	.05	.09	.08		.10		.84				.90	.40	.20	.10		1.40											.60	.20	6.60							
Andrews.	do.														.11	.04	.03	.40		.64	.30											1.15	.03	4.36						
Asheville.	do.	T.	1.12	.21				T.							.43	.11	.51	.21	.04	.23	T.	1.19	.43									.66	.01	4.15						
Banner Elk.	do.		.16	2.00					.10							.10	.20	.20	.45												.50	.35	6.16							
Blantyre.	do.		.18	.98	.93										.61	.82	1.20	.16	.11		1.10										.59	.31	7.68							
Blowing Rock.	Great Kanawha	1.01		1.75												.67	.57																	.02	.65	.19	7.32			
Brevard.	Tennessee.	.05		.84	.36	.01	.01	.02							.02	1.00	.50	.92	.12	.34	.03	21	1.19										.47	.19	6.39					
Bryson City |||	do.				.28											.30	.13	.05			.16	.24	.99										.36	.59	3.10					
Cane River.	do.		.30		.21				.09	.02						.10	.25	.16		.19			.02	.79									.73	.02	2.88					
Cullowhee.	do.		.33	.37						.05						.72	.14	T.	.46		.06												.66	T.	3.99					
Ellijay.	do.		.38	.35	T.				.04							.18	.09	.30	.04	.08	T.		.12	.87								.70	.20	3.35						
Highlands.	do.		.45	.28	.92	.08			.17							.28	.60	2.65	.52	.03		.12	.96									1.62	.15	8.83						
Hot Springs.	do.								.90							.32	.33	.23	.35	T.										.48		3.61								
Jefferson.	Great Kanawha	.17	T.	1.13	1.03				.21								.40	.51	.25	.42	.13	.26	1.58									.60		6.69						
Marshall |||	Tennessee.			.40					.12								.25	.63	.03	.20	.20		.80									.17	.50	3.30						
Murphy |||	do.		T.	.15	.07					.80							.48	.10	.05		.30	.33	T.	.50								.37	1.09	4.24						
Rock House.	Savannah.	.60	.08	1.15	.87	.05			1.08								.10	.80	1.66	.41	.10	.04	1.00	.26								1.64		9.79						
Transon.	Great Kanawha	.12		1.77	1.32				.41								.28	.42	.17	.30	T.	1.55	1.91								.58		8.83							
Waynesville |||	Tennessee.		.30	.38	.20		T.										T.		.36	.10	.05	.18	.98									T.	.40	2.95						
<i>Virginia.</i>																																								
Blacksburg.	Kanawha			.15	.47				.45									.07	.04	.19	.18		1.39										.05		2.99					
Burkes Garden.	Tennessee.				.15				.33								T.	.19	.05	.03	.04	.28	.22	.52	T.									.50		3.62				
Elk Knob.	do.								.24									.17					.72	T.	.20	.72								.50	T.	2.97				
Ivanhoe |||	Kanawha	T.		T.	.42	.02	.02			.56							.04			.20	.26	.14	.30	1.70	.20								T.	.50	4.51					
Max Meadows.	do.			.02	.30	.12			.15		.60						.12		.22		.08	.22	.80	.30	.90	.22									.41		3.36			
Mendota |||	Tennessee.																		.05	.18		.60	.05	1.33											1.02	4.63				
Mountain Lake.	Kanawha																		.10	.20	.25	.10	.21	1.80	T.										.25	.05	2.51			
Radford |||	do.				.52	.34												.04		.20	.16		.98	.33											.21		3.73			
Speers Ferry |||	Tennessee.																	.01		.07	.34	.06	.32		.26	.75											1.30	3.54		
Wytheville.	Kanawha		.05	.20	.12				.16		.53							.01			.07																	.55		2.89

* Precipitation included in that of the next measurement.

† Separate dates of falls not recorded.

||| Precipitation for the 24 hours ending on the morning when it is measured.

T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—Maximum and minimum temperatures at selected stations for September, 1913. District No. 3, Ohio Valley.

Date.	Pennsylvania.				West Virginia.										Ohio.													
	Greenville.		Pittsburgh.		Charleston.		Elkhorn.		Elkins.		Glenville.		Huntington.		Parkersburg.		Wheeling.		Canton.		Cincinnati.		Columbus.		Dayton.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1.	87	52	87	59	90	70	85	59	86	52	91	51	93	54	90	60	86	55	90	56	97	68	91	66	94	65		
2.	94	53	90	61	92	65	87	67	86	57	92	60	93	60	91	64	88	58	95	59	98	70	94	63	98	67		
3.	93	57	89	65	90	65	80	58	83	52	90	59	88	63	87	65	93	61	94	61	97	71	94	70	97	67		
4.	91	63	87	66	88	64	77	67	84	62	92	58	93	62	88	66	92	61	90	63	91	69	88	63	87	65		
5.	85	60	89	67	91	66	85	62	88	57	90	60	92	64	91	67	93	62	90	58	92	67	91	62	91	61		
6.	91	48	92	68	92	70	87	60	90	59	93	60	90	65	94	69	95	63	92	59	92	70	93	68	93	66		
7.	92	61	88	67	90	69	86	68	87	61	90	59	88	65	78	70	85	67	89	64	91	71	88	72	91	69		
8.	78	63	78	63	82	70	82	63	78	63	82	60	85	69	79	65	81	69	77	64	86	65	80	58	82	60		
9.	73	45	72	56	80	64	79	62	74	49	80	58	81	61	76	57	77	53	71	50	78	58	75	54	77	55		
10.	76	35	72	48	79	54	75	54	72	41	83	44	81	51	76	52	78	45	77	43	82	56	76	53	71	51		
11.	80	33	80	48	80	52	79	44	77	40	81	42	88	48	81	48	83	46	83	40	88	58	84	52	87	53		
12.	69	46	66	58	84	61	80	55	75	49	85	44	81	55	73	62	83	47	65	55	71	60	67	56	70	56		
13.	72	41	63	50	71	63	72	59	66	42	72	47	70	55	66	52	71	49	65	45	67	52	65	47	64	45		
14.	66	27	64	45	68	47	70	47	69	37	70	44	73	46	66	46	70	39	66	35	66	50	62	45	64	45		
15.	72	37	71	44	71	56	60	55	70	41	72	44	72	53	74	53	74	41	75	40	74	56	73	50	73	50		
16.	68	47	66	60	74	59	65	54	71	55	75	54	77	57	69	56	65	45	64	46	76	61	74	54	74	58		
17.	67	56	66	60	74	63	70	59	63	53	70	44	70	57	68	61	66	57	70	54	74	66	72	63	71	65		
18.	65	56	64	59	76	65	69	60	71	58	75	55	76	63	70	62	64	61	67	57	71	63	68	58	66	60		
19.	75	52	70	58	77	64	73	55	70	58	80	58	77	63	75	59	74	57	76	45	75	60	74	55	75	57		
20.	81	51	73	62	83	67	79	57	79	54	82	57	81	60	82	56	78	52	78	52	76	51	74	55	76	53		
21.	62	49	64	48	70	53	75	38	62	44	70	58	56	52	60	50	56	53	56	49	53	45	56	45	52	44		
22.	52	37	52	44	67	49	58	42	51	34	68	42	63	46	57	43	57	45	50	43	56	43	52	41	50	39		
23.	65	28	63	38	72	42	68	32	64	31	72	35	69	38	67	37	69	35	65	31	73	40	66	36	69	34		
24.	77	35	78	46	79	49	75	44	79	35	80	43	78	40	79	45	81	36	79	38	82	53	80	50	80	56		
25.	83	36	80	52	80	50	78	46	80	41	81	44	79	42	79	48	81	34	83	45	79	54	80	55	78	53		
26.	79	43	78	53	80	55	76	48	77	42	82	45	78	50	82	52	88	51	78	51	69	53	74	48	65	48		
27.	66	42	65	49	77	58	70	56	64	42	78	46	69	50	64	49	71	48	67	42	68	46	66	47	61	41		
28.	76	31	76	44	79	46	75	52	76	36	80	54	80	45	79	41	80	42	78	35	78	50	74	46	74	43		
29.	69	44	69	62	78	64	70	64	72	58	79	53	68	49	74	63	80	42	72	55	75	65	68	62	73	64		
30.	78	60	78	62	79	62	78	63	78	60	78	55	79	64	80	55	80	60	82	61	79	59	79	61	79	61		
Mns..	76.1	46.3	74.5	55.4	79.8	59.4	75.3	54.7	74.7	48.8	80.3	51.3	78.6	54.9	76.5	56.2	77.4	51.3	76.1	50.1	78.5	58.4	75.8	55.0	76.5	55.0		
Date.	Ohio.				Indiana.										Kentucky.													
	Marion.		Waverly.		Butlerville.		Evansville.		Indianapolis.		Kokomo.		Rockville.		Worthington.		Philo, Ill.		Beattyville.		Bowling Green.		Earlington.		Greensburg.		Lexington.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.	91	61	93	52	97	66	97	70	94	66	95	61	101	65	96	64	99	59	99	52	101	60	106	65	99	56	94	67
2.	92	62	95	57	99	65	97	73	96	71	98	61	102	67	96	66	100	64	97	55	103	61	105	67	102	62	96	72
3.	98	65	93	59	98	64	99	76	96	74	96	63	102	66	98	67	100	65	95	56	102	65	105	66	103	62	95	69
4.	84	64	91	59	90	66	96	74	83	67	86	63	92	65	91	69	92	66	91	55	99	69	103	67	95	64	91	70
5.	88	62	92	61	91	63	90	71	88	63	89	60	93	63	90	67	92	62	99	58	95	68	96	67	94	65	91	69
6.	94	60	96	63	96	65	91	73	92	69	82	62	96	66	97	67	95	67	100	59	96	66	99	66	95	66	92	70
7.	88	60	96	66	95	69	89	76	86	72	91	65	95	68	97	68	98	66	97	63	98	66	95	66	96	66	92	70
8.	81	68	85	66	90	63	90	70	82	63	83	68	92	65	89	66	86	67	94	63	93	68	97	67	96	66	96	69
9.	81	49	77	57	81	58	82	66	78	53	79	48	83	56	78	66	80	57	87	64	91	64	93	67	87	65	79	60
10.	85	44	78	48	86	52	89	59	82	51	84	44	87	50	84	55	84	52	90	52	94	58	97	58	94	55	83	57
11.	82	42	87	44	91	57	88	69	89	60	88	48	93	59	87	60	90	56	91	49	92	59	95	63	91	63	86	62
12.	71	59	72	50	81	62	74	60	69	56	75	58	74	59	75	60	69	56	90	57	86	62	81	63	90	59	86	61
13.	71	41	67	49	68	44	70	55	67	49	69	43	71	49	66	60	66	46	77	50	75	57	77	52	75	54	66	62
14.	72	41	65	40	70	45	70	54	60	47	72	40	74	46	70	48	72	47	78	44	74	55	72	56	66	63	67	49
15.	76	41	74	50	72	52	71	56	71	52	66	45	77	50	66	55	66	47	81	57	69	60	76	60	74	60	77	57
16.	74	54	77	55																								

TABLE 3.—*Maximum and minimum temperatures at selected stations for September, 1913. District No. 3—Continued.*

Date.	Kentucky.						Tennessee.										Decatur, Ala. ^{##}				Asheville, N. C.		Virginia.					
	Louisville.		Maysville. ^{##}		Williamsburg. ^{##}		Chatta-nooga.		Johnson City. ^{##}		Knoxville.		Nashville.		Palmetto.		Sparta.		Waynes-boro.		Blacks-burg.		Wythe-ville.					
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	96	68	100	57	97	60	94	67	97	60	92	62	95	67	97	67	94	58	98	64	94	65	84	61	87	51	86	54
2....	98	72	101	59	97	58	95	69	92	63	94	66	97	70	99	68	96	63	98	66	97	68	87	61	83	56	84	58
3....	97	71	98	59	96	56	93	69	81	59	92	67	99	71	101	68	96	60	100	65	98	69	81	58	75	53	75	54
4....	93	72	96	61	91	59	84	71	90	61	80	71	96	75	98	66	94	69	97	66	96	72	67	68	79	52	72	62
5....	91	69	96	63	92	61	87	70	97	63	89	67	86	68	85	67	95	64	83	65	84	70	79	66	85	57	80	61
6....	89	72	96	63	94	62	86	72	90	61	91	69	91	69	90	68	95	65	92	68	90	69	81	63	87	60	83	58
7....	90	74	78	65	96	58	90	69	101	61	91	68	92	66	96	69	94	62	90	70	92	71	83	60	87	59	85	60
8....	92	72	87	66	92	60	93	67	91	60	90	67	91	70	95	68	93	60	93	70	92	68	84	55	82	58	81	61
9....	82	65	83	56	89	64	90	70	89	59	88	64	91	70	97	67	92	60	93	67	90	69	76	58	74	52	72	50
10....	88	59	86	50	88	60	84	67	89	60	83	65	89	67	87	67	91	60	94	70	86	71	68	54	68	40	68	43
11....	88	65	92	50	85	57	83	68	90	53	83	59	88	69	89	62	92	62	88	62	85	61	78	44	78	36	77	38
12....	75	60	77	53	90	61	86	62	92	53	87	63	86	66	89	62	90	57	89	58	87	61	82	53	81	49	80	52
13....	70	52	71	50	88	70	81	65	83	53	81	65	78	64	79	64	81	62	75	64	84	62	79	59	76	52	73	48
14....	69	51	68	42	85	68	73	62	66	52	66	58	67	58	80	62	78	59	74	61	80	65	65	53	62	44	62	48
15....	76	57	76	47	73	61	65	60	72	49	70	61	74	64	73	66	72	67	71	58	83	63	57	60	58	48	57	51
16....	74	64	82	55	84	61	71	60	80	48	81	59	71	63	72	62	76	62	76	63	84	60	64	54	60	53	58	52
17....	76	65	72	58	71	63	69	64	73	52	71	65	73	66	70	65	74	65	71	63	71	58	68	58	64	56	55	
18....	75	64	77	60	76	63	73	64	71	55	69	64	77	64	80	65	79	68	83	63	75	65	69	61	67	59	65	60
19....	76	64	78	61	77	60	80	62	89	55	79	62	80	62	82	62	79	63	86	55	81	62	75	60	73	59	74	59
20....	66	49	82	60	78	58	77	59	84	52	78	58	71	53	71	61	74	56	73	53	63	76	57	80	61	77	59	
21....	56	46	60	45	64	40	61	49	62	42	60	47	61	48	64	48	60	45	65	45	64	53	59	44	68	45	59	41
22....	59	43	63	42	67	37	70	41	65	32	67	43	72	43	75	45	70	37	74	34	72	41	61	36	57	34	55	38
23....	77	43	80	35	74	38	76	46	80	38	74	43	79	47	82	48	80	40	81	39	78	43	73	36	70	32	70	34
24....	80	56	86	36	80	42	78	49	80	42	78	48	80	54	83	49	82	43	81	44	78	46	72	41	73	32	74	38
25....	78	59	83	45	81	43	80	51	82	45	77	51	80	53	84	47	82	44	83	45	82	49	74	44	76	36	74	40
26....	67	56	82	46	78	42	81	55	80	45	79	51	75	58	79	57	80	50	77	55	80	49	77	45	79	36	78	43
27....	71	50	76	49	82	57	78	62	75	45	77	61	74	57	80	60	76	60	76	58	82	60	74	51	70	41	69	56
28....	73	53	85	43	80	54	83	62	80	53	79	60	79	61	84	66	85	56	81	63	83	63	66	58	70	53	72	56
29....	80	65	72	52	71	50	69	64	81	55	68	64	78	67	80	66	74	66	75	67	74	69	64	58	71	45	72	56
30....	80	66	86	63	83	58	82	66	82	58	81	66	85	67	86	68	82	64	86	69	82	67	77	60	80	60	77	57
Mns.	79.4	60.7	82.3	53.0	88.3	55.7	80.4	61.9	82.8	52.7	79.8	60.5	81.8	62.7	84.2	61.9	83.4	57.9	83.1	59.8	83.3	61.7	73.4	54.0	74.1	49.2	72.5	51.4

^a, ^b, ^c, etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.^{##} Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.